

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|--|-----------------|----------------------|--------------------------|-----------------|----------------------|
| 09/848,491 | 05/03/2001 | Deepa Ramaswamy | 200-0294 | 7773 | |
| 28549 | 7590 08/21/2002 | | | | |
| KEVIN G. MIERZWA ARTZ & ARTZ, P.C. 28333 TELEGRAPH ROAD, SUITE 250 | | | EXAMINER WAKS, JOSEPH | | |
| | | | | | SOUTHFIELD, MI 48034 |
| | | | 2834 | 2834 | |
| | | • | DATE MAILED: 08/21/2002 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| • | | | | | | |
|---|-------------------------|--|--|--|--|--|
| | Application No. | ,⊸pplicant(s) | | | | |
| | 09/848,491 | RAMASWAMY ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Joseph Waks | 2834 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | |
| 1) Responsive to communication(s) filed on 03 N | <u>//ay 2001</u> . | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ Thi | is action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>116</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) 12 and 14 is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-11,13,15 and 16</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) \boxtimes The drawing(s) filed on <u>03 May 2001</u> is/are: a) \square accepted or b) \boxtimes objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal F | (PTO-413) Paper No(s) Patent Application (PTO-152) | | | | |

Application/Control Number: 09/848,491 Page 2

Art Unit: 2834

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-11, 13, 15, and 16 in Paper No. 3 is acknowledged. The traversal is not found persuasive because applicants presented no basis for traversal.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;

Art Unit: 2834

(4) if a mixture, its ingredients;

(5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract of the disclosure is objected to because it does not include that which is new in the art to which the invention pertains. Correction is required. See MPEP § 608.01(b).

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the first set of vehicle idle entry conditions, the predetermined maximum idle speed, the predetermined minimum pedal position, the desired brake torque, the desired engine speed, the first desired effect, the first set of operating conditions, the second set of operating conditions, the current vehicle idle mode for the predetermined amount of time as recited in claim 1.

Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - a. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 6. Claims 1-11, 13, 15 and 16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The first set of vehicle idle entry conditions, the predetermined maximum idle speed, the predetermined minimum pedal position, the desired brake torque, the desired engine speed, the first desired effect, the first set of

Art Unit: 2834

operating conditions, the second set of operating conditions, and the current vehicle idle mode for the predetermined amount of time are not defined in the specification.

Page 4

- 7. Claims 1-11, 13, 15 and 16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For the reason indicated above one skilled in the art would not be able to make and/or use the invention.
- 8. The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 9. Claims 1-11, 13, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite and replete with indefinite language that makes it difficult to follow which are the new limitations and which are the features already claimed. For example:

In claim 1, lines 1-2, "the idle speed" lacks antecedent basis, lines 9-10, "a predetermined maximum idle speed" is indefinite since it does not indicate the idle speed of what (engine or vehicle for example) is addressed in the limitation, and line 19, "engine idle speed" should be said engine idle speed--.

In claim 2, lines 2 and 7-8, "a desired engine brake torque" should be -sad desired engine brake torque--, lines 3 and 8-9, "a vehicle system controller" should be -said vehicle system controller--, lines 4-5 and 10, "a desired engine speed" should be -said desired engine speed--,

Art Unit: 2834

Page 5

lines 5 and 10-11, "a first desired effect" should be -said first desired effect--, and lines5-6, "a first set of operating conditions" should be -said first step of operating conditions--.

Applicants are requested to amend all the claims to avoid the indefinite language. Also, in order to improve the clarity of the claim language examiner suggests to avoid unnecessary repetitions of features already claimed in the claim itself or in the claims the particular claim depends of.

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 1-11, 13, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pels et al. (US 6,109,237) in view of Field (US 5,081,365).

Pels et al. disclose a method of controlling the idle speed of the engine including steps of: determining whether the vehicle is below a predetermined maximum idle speed and the acceleration pedal is below the predetermined minimum pedal position (Re column 6, lines 60-65), scheduling the desired engine brake torque and selecting the vehicle system controller 23 to control the generator and to schedule a desired engine speed. However, Pels et al. do not disclose the step of turning of the engine at certain conditions when the engine has been in the current vehicle idle mode.

Art Unit: 2834

Field discloses in column 1 the step of turning of the engine when the engine has been in the current vehicle idle mode when the batteries are well charged for the purpose of increasing the engine fuel economy.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the method of controlling the idle speed as taught by **Pels** and to provide the step of turning of the engine when the engine has been in the current vehicle idle mode when the batteries are well charged as taught by **Field** for the purpose of increasing the engine fuel economy.

Re claims 3-11, 13, 15, and 16, the conditions of low battery stage of charge, the replenishing the vacuum systems, the purging of fuel vapor canisters, the learning adoptive fuel systems shifts, and the use of air conditioning system are acknowledged by the applicants as being conventional conditions creating an electrical or power demands during that may occur during engine idling. **Pels et al.** disclose in column 2, lines 49-59 the control system that will adjust the engine idling speed in response to the load change by using the electric machine operatively coupled to the engine to applying the braking torque to reduce the idling speed below the allowable speed or to apply the driving torque to increase the torque above the minimum allowable speed. It would be obvious to one of ordinary skill in the art to adopt the control system to response to any or all of the well known in the art conditions as recited by applicants for the purpose of maintaining safe and economical level of engine idling speed.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d

Art Unit: 2834

1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1-11, 13, 15, 16 are provisionally rejected under the judicially created doctrine of double patenting over claims 2-16 of copending Application No. 09/712,436. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: controlling the idle speed of an engine comprising determining the set of vehicle idling conditions comprising whether the vehicle is below a predetermined maximum idle speed and accelerator is below minimum pedal position, activating a vehicle system controller to control the generator to control the engine idle speed when the state of charge of the battery is below predetermined battery minimum state of charge, scheduling the desired brake torque and selectively activating the vehicle system controller to control the generator.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending

Art Unit: 2834

application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Prior Art

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Communication

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (703) 308-1676.

The examiner can normally be reached on Monday through Thursday 8 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

JØSEPH WAKS
PRIMARY PATENT EXAMINER

TC-2800

JW

August 17, 2002

Page 8